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09/893,622

06/29/2001

Joung Jae Lee

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12/19/2002

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WASHINGTON, DC 20006

EXAMINER

NEGRON, ISMAEL

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 12/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/893,622

Applicant(s)

LEE, JOUNG JAE

Examiner

Ismael Negron

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 40) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment filed on October 3, 2002 has been entered. Claims 1, 17, 19 and 20 have been amended. No claims have been added or cancelled. Claims 1-28 are still pending in this application, with claims 1, 27 and 28 being independent.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11 and 15-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Prior Art in view of Hoven et al. (U.S. Pat. 2,865,133).

The Prior Art discloses a back lighted LCD display panel having:

- **a mold frame having first and second end portions**, Figure 1;
- **a lamp having first and second end portions**, page 3, lines 21 and 22 of the specification as filed;
- **lamp supporters located at the first and second end portions of the mold frame**, inherent;
- **the lamp supporters receiving the lamps**, inherent;
- **the lamps being received in a lower portions of a display area**, page 3, lines 5 and 6 of the specification as filed;

- **a reflection sheet located over the mold frame and below the lamps, Figure 1, reference number 4;**
- **a diffusion plate over the lamps, Figure 1, reference number 5;**
- **a diffusion plate supporting members located between the reflection sheet and the diffusion plate, Figure 1, reference number 6;**
- **the diffusion plate supporting members having an elastic material contact portion contacting the diffusion plate, page 4, lines 11 and 12 of the specification as filed;**
- **the contact portion being made of a soft material, page 4, lines 11 and 12 of the specification as filed;**
- **the contact portion being made of rubber, page 4, lines 11 and 12 of the specification as filed;**
- **the contact portion being made of plastic, page 4, lines 1 and 2 of the specification as filed;**
- **the diffusion plate supporting members having a conical shape, Figure 1;**
- **means for coupling the diffusion plate supporting member and the mold frame, inherent;**
- **means for immovably coupling the diffusion plate supporting member and the mold frame, inherent;**

- **the diffusion plate supporting members including a top portion and a bottom portion, the top portion having a smaller circumference than the bottom portion, Figure 1;**
- **a plurality of diffusion plate supporting members supporting the diffusion plate; and**
- **a panel guide located opposite the mold frame with respect to the diffusion plate, Figure 1, reference number 6.**

The Prior Art discloses all the limitations of the claims, except:

- the diffusion support member having sufficient rigidity to prevent the diffusion plate from dropping down;
- the support member being made out of metal;
- the contact portion including a cap having an insertion hole for receiving one end of the support portion;
- contact portion having a projection for preventing the contact portion from being detached from the support portion;
- the top portion of the support portion having a first conical shape and the bottom portion having a second conical shape;
- the second conical shape being smaller than the first conical shape;
- a cylindrical middle portion between the first and second portions;
- the support portion including a first hole;
- the mold frame including a second hole;

- a fastening element passing through the first and second hole for coupling the mold frame and the supporting member; and
- the fastening member being a screw.

Hoven et al. discloses a support structure having :

- **a supporting member**, Figure 1, reference number 12;
- **the supporting member being made out of metal**, column 1, lines 50-52;
- **the supporting member having an elastic material contact portion**, Figure 1, reference number 13;
- **the contact portion being made of rubber**, column 1, lines 57 and 58;
- **the contact portion being made of plastic**, column 1, line 59;
- **the supporting member having a conical shape**, Figure 1;
- **the contact portion including a cap having an insertion hole for receiving one end of the support portion**, Figure 5, reference number 17;
- **the contact portion having a projection for preventing the contact portion from being detached from the support portion**, column 1, lines 57-62;
- **the top portion of the support portion having a first conical shape and the bottom portion having a second conical shape**, Figure 3;

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- **the second conical shape being smaller than the first conical shape, Figure 3; and**
- **a cylindrical middle portion between the first and second portions.**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a diffusion plate support member with sufficient rigidity as to support the weight of the diffusion plate, since supporting the diffusion plate was the only reason for the diffusion plate support member to be part of the display structure, and failing to perform its intended function would render the diffusion plate support member useless.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the Prior Art and Hoven et al. to obtain a support member with the rigidity to support the weight of the structure it is supporting, but also a contacting surface soft enough as to not create scratches or any other kind of surface damage to the surface it is in contact with, as per the teachings of Haven et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use screws to couple the supporting portion to the mold frame since the Examiner take Official Notice that the use, and its advantages over other fastening means, of screws as fastening elements is old and well known in the art.

***Relevant Prior Art***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Standard Handbook of Fastening and Joining, 2<sup>nd</sup> Edition** (pages 1.2-1.4) discloses threaded fasteners as being of general acceptance and wide-ranging use, and provides a list of some of the recognized advantages of such threaded fasteners over other types of fastening means.

**Bidwell** (U.S. Pat. 134,783), **Hayes** (U.S. Pat. 316,619), **Lambert** (U.S. Pat. 664,652), **McGahan** (U.S. Pat. 667,555), **Craig** (U.S. Pat. 977,710) and **Crain** (U.S. Pat. 1,603,195) disclose various types of threaded fasteners.

***Response to Arguments***

Applicant's arguments filed October 3, 2002 have been fully considered but they are not persuasive.

4. Regarding the Examiner's rejection of claims 1, 27 and 28 under 35 U.S.C. 103(a) as unpatentable over the admitted Prior Art (Prior Art) in view of Hoven et al., the applicant argues that the cited reference fails to disclose all the features of the claimed invention, specifically a portion supporting member having an elastic material. In addition, the applicant argues that the Prior Art fails to disclose lamp supporters for supporting lamps. Even further, the applicant argues that Hoven et al. pertains to an unrelated art and that the examiner used improper hindsight to reconstruct the claimed invention.



5. In response to applicant's arguments regarding a portion of the supporting member having an elastic material, the applicant is advised that claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974). In this case, by applicant's own admission, the Prior Art support member may be made of a soft material such as rubber (page 4, lines 11 and 12 of the specification as filed). A support member made of such soft material would, broadly interpreted, comply with the cited limitation. However, to better address the subject matter of the claimed invention, a new rejection based on 35 U.S.C. 103 has been issued.

6. In response to applicant's arguments regarding the lamp supporters the applicant is directed to page 3, lines 21 and 22, where the applicant admits that the Prior Art includes a plurality of lamps. Such disclosed plurality of lamp would inherently require a support, as such plurality of lamps could not be place in space without it.

7. In response to applicant's argument that Hoven et al. is art unrelated to the claimed invention, the applicant is advised that while it might be true that the general disclosure of Hoven et al. refers to providing furniture legs, as the applicant argues, it is also a fact that the cited reference is related to elongated, rigid support members having a longitudinal axis extending at an angle to the principal face of the supported surface, as set forth by the definition of the class to which it pertains. One of ordinary skill in the art, at the time the claimed inventions was made, would have been drawn to the teachings Hoven et al. in searching for ways to protect surfaces against rigid support members. In addition, while the applicant claims that the claim invention pertains to the

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field of illumination assemblies for backlighting LCD devices, the gist of the instant subject matter revolves about the support member, and is related to the art of LCD devices merely by virtue of its intended use.

8. Regarding the Examiner's rejection of claims 12-14 under 35 U.S.C. 103(a) as unpatentable over the admitted Prior Art (Prior Art) in view of Hoven et al., the applicant traverses the Examiner's taking Official Notice of screws, and their advantages over other fastening means, being old and well known in the art.

In response to applicant's surprising traverse, a list of references supporting the Examiner's Official Notice is provided in Section 3 of the instant Office Action.

### ***Conclusion***

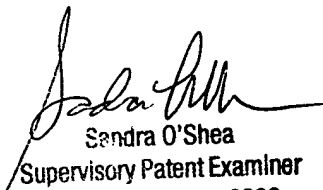
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negron whose telephone number is (703) 308-6086. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached on (703) 305-4939. The facsimile machine number for the Art Group is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Sandra O'Shea  
Supervisory Patent Examiner  
Technology Center 2800

Inr

December 4, 2002